U.S.E.P.A. REGION IX
MECHANICAL INTEGRITY TEST (MIT)
PART I: REQUIREMENTS FOR INTERNAL TEST

The U. S. Environmental Protection Agency (EPA) Region 9 requirements described below are effective as of May 1, 1992. For further reference, consult 40 CFR §146.8(b). Part I MIT may be demonstrated by one of two methods:

METHOD A

1) An annular pressure demonstration is performed at the system's maximum water injection pressure (pressure must be at least 300 psig).
2) The system's wells are tested at least once every five years or whenever packer reseating is needed. A test ensuing from packer reseating will be regarded as an official MIT demonstration.
3) Casing annuli and injections are monitored **monthly** and the results are included in the annual report to the director.

METHOD B

1) Test pressure is to be 1000 psig (it is not necessary to test to maximum water injection pressure).
2) Water injection pressure tests are conducted at least once every three years or whenever packer reseating is needed (see Method A (2)).
3) Casing annuli and injection pressure are monitored **weekly** and the results are included in the annual report to the director.

In applying either Method A or Method B, the operator must adhere to the following EPA specifications:

- All tests must last at least 30 minutes, during which time the pressure should not increase or decrease by more than 5%.
- A minimum differential pressure of 300 psig between tubing and tubing-casing annulus is to be maintained throughout the MIT.
- The EPA will consider alternative test parameters and frequencies when requested in writing. Requirements might be less stringent, for example, where there are no Underground Sources of Drinking Water (USDWs).
- The 30 days minimum notification period specified in federal regulations may be shortened by the EPA Regional Administrator. MIT information will be accepted as valid **only** if EPA has been given at least 14 days notice to make arrangements to witness the MIT.
- If a well fails the MIT, the well is to be shut in immediately and steps for remediation taken as soon as possible. The operator will still be bound to report any noncompliance as required in 40 CFR §144.28(b).
- Remediation may consist of squeeze cementing holes in the casing, running a liner inside the casing, or setting tandem packers to isolate a hole in the casing when it is not practical to squeeze the hole and the hole poses no danger to any USDWs. These and other alternatives will be considered on a case-by-case basis.
- If mechanical integrity is not achieved within the specified time period, the EPA may undertake an enforcement action. Time extensions to achieve compliance are permissible, but they must be justified and requested in writing.